1.9 EX892 Esc no, 247

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

Extension Service Circular 247

August 1936

STATISTICAL ANALYSIS

CFFICE OF EXPERIMENT STATIONS

OF

SEP-26 1935

TRENDS IN 4-H CLUB WORK

With Special Reference to 1935

Barnard D. Joy
Associate Agriculturist
Extension Studies and Teaching

Contents

-Alexan and their territorial of the prices are alled a granterial and the	Page
Enrollment in 4-H club work	2
Enrollment per county extension agent	4
How many rural boys and girls are reached by 4-H program	
Percentage of completions	
Percentage of members who re-enroll	
Age of 4-H members	
Out of school enrollment	
Club organization	17
4-H club activities	19
4-H club local leaders	20
Outlook	
Enrolling more new members	22
Increasing length of membership	
Summary	
Supplement	26

DISTRIBUTION: A copy of this circular has been sent to each State extension director; State leader and assistant State leader in county agricultural, home demonstration, and 4-H club work; agricultural-college library; and experiment-station library.

STATISTICAL ANALYSIS

TO

TRENDS IN 4-H CLUB WORK

With Special Reference to 1935

Enrollment in 4-H Club Work

The total enrollment of 4-H club members reached a new high point of almost a million in 1935. This was in keeping with the steady upward trend in enrollment since the time that the work was first organized. Figure 1 which compares the 5-year averages of the last 20 years with the 1935 enrollment illustrates this increase.

The 1935 enrollment of 997,744 is an increase of more than 81,000 over the 1934 enrollment and more than 102,000 over the 5-year average of 1930 to 1934. This is an 8.9 percent increase over 1934 and an 11.4 percent increase over the 5-year average.

Compared with an enrollment of 565,046 in 1925, total enrollment shows an increase of 76.6 percent in the last 10 years. If, however, the last two 5-year periods are compared, it is found that the enrollment had reached 822,714 in 1930 or a 45.6 percent gain over 1925. From 1930 to 1935 the gain of 175,030 members was an increase of 21.3 percent.

Only twice between 1915 and 1935 have there been periods of declining enrollment, and each of these declines lasted for 2 years. They occurred from 1918 to 1920 after the World War, and from 1932 to 1934 during the depression.

The upward trend in enrollment has been uniform for both boys and girls. Since separate data for boys and girls were first available in 1923 there has been little change in the ratio of three girls for every two boys enrolled. In 1935 the exact percentages were: Girls, 59.34 percent; boys, 40.66 percent. Ten years earlier in 1925 the percentages were: Girls, 60.25 percent; boys, 39.75 percent.

The increase in total enrollment has been due partly to the increase in county extension agents and partly because the average agent enrolled a larger number of members.

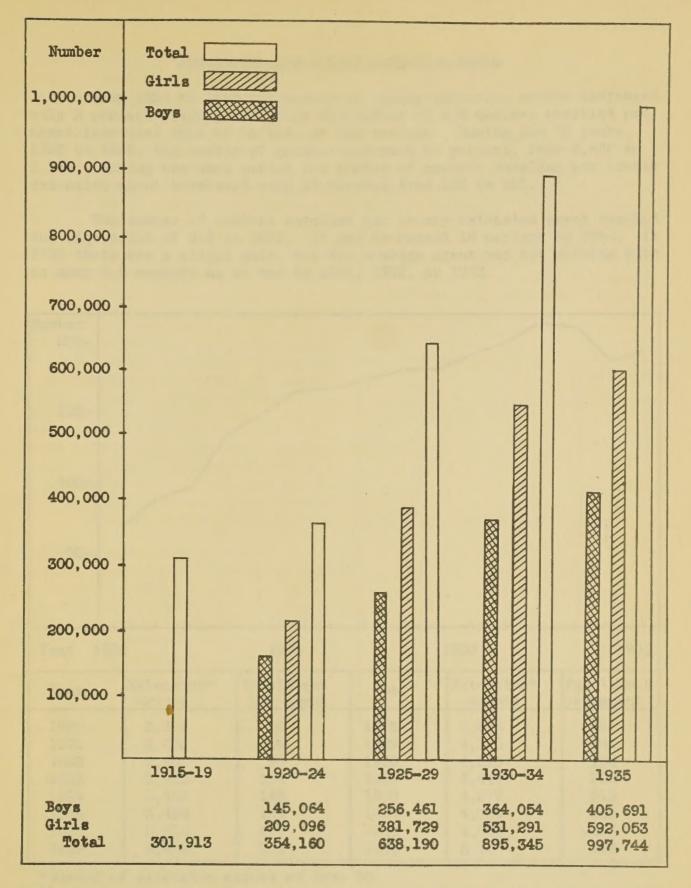
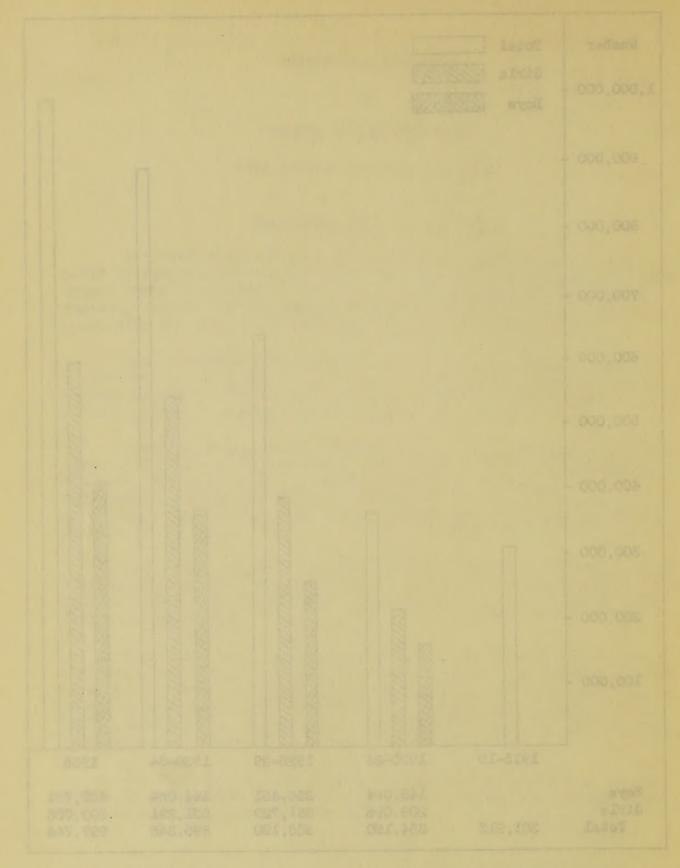


Figure 1 - 4-H club membership. Average yearly enrollment, 1915 - 1935



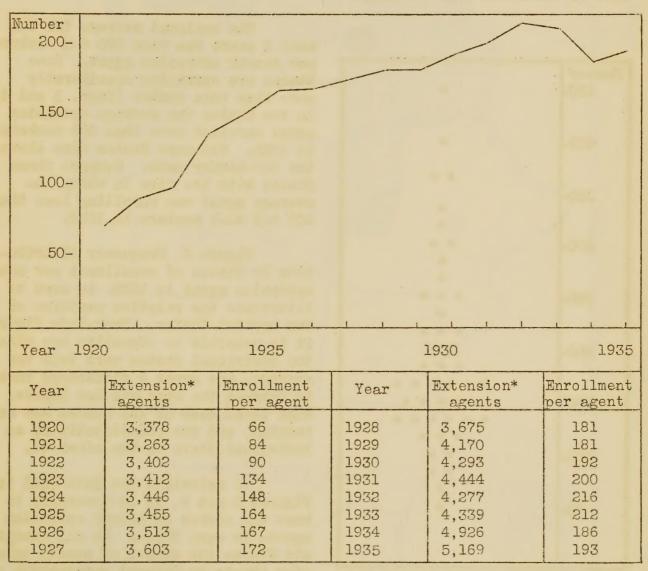
C

Pigure 1 - 4-2 olub memberints. Average yearly sandlinest, 1915 - 1915

Enrollment Per County Extension Agent

From 1920 to 1925 the number of county extension agents increased only 2 percent (figure 2), while the number of 4-H members enrolled per agent increased from 66 to 164, or 148 percent. During the 10 years, 1925 to 1935, the number of agents increased 50 percent, from 3,455 to 5,169. During the same period the number of members enrolled per county extension agent increased only 18 percent, from 164 to 193.

The number of members enrolled per county extension agent reached the high point of 216 in 1932. It had decreased 14 percent by 1934. In 1935 there was a slight gain, but the average agent was not working with so many 4-H members as he was in 1931, 1932, or 1933.



^{*}Number of extension agents on June 30.

Figure 2.- 4-H club enrollment per county extension agent, 1920-35.

Enrollment per county extension agent may be calculated for each State and is useful as a measure of the volume of 4-H work that is being done. It is a more satisfactory measure of volume than total enrollment per State, because it makes allowance for the differences in the size of States, the amount of extension funds available, and the number of people on the extension staff. This measure can be used to compare the volume of work done by States that employ agricultural and home demonstration agents who devote part of their time to 4-H club work with States where the agricultural and home demonstration agents devote all their time to adult work and county club agents are employed to give full time to 4-H club work. Whether a portion of each agent's time or the full time of part of the agents is devoted to 4-H club work, the enrollment per county extension agent is a measure of the number of boys and girls reached per unit of extension time or money.

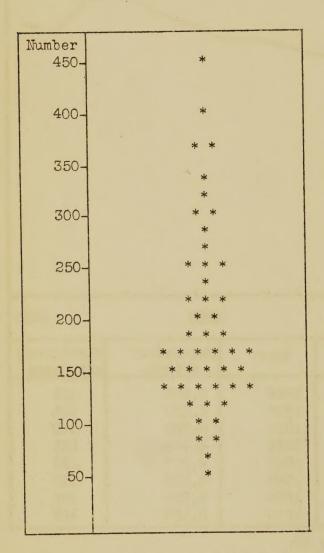


Figure 3.--Frequency distribution by States of enrollment per county extension agent in 1935.

The national average for the past 5 years has been 200 4-H members per county extension agent. Some States are enrolling considerably more than this number (figs. 3 and 4). In two States the average extension agent enrolled more than 400 members in 1935. Six more States were above the 300-member mark. Compare these States with the five in which the average agent was enrolling less than 100 4-H club members in 1935.

Figure 3, Frequency distribution by States of enrollment per county extension agent in 1935, is used to illustrate the relative position of the several States. From this figure it is possible to visualize how widely the individual States vary from the average, how great a difference there is between the high and low States, what level most of the States are maintaining, and the relationship of an individual State to the other 47.

To calculate the data used in figures 3 and 4, it is necessary to know the number of county extension agents in each State. In all except six States the number of county extension agents on Federal appointment on June 30, 1935 was used. In the remaining six States a considerable number of part-time assistant agents either were or were not on Federal appointment on June 30, 1935. In these States the total months of service by county

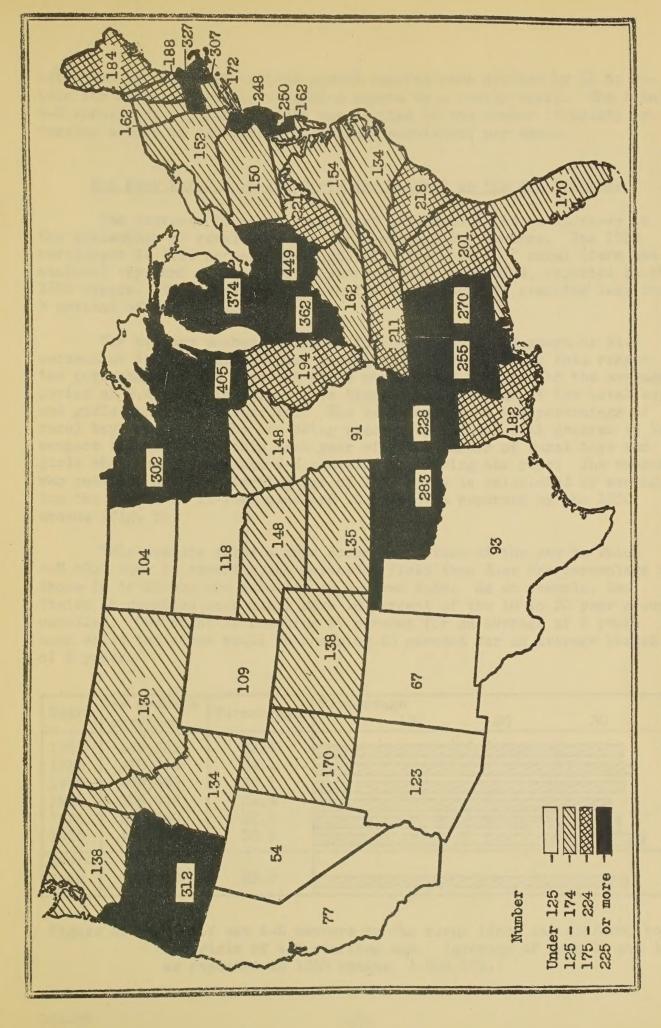
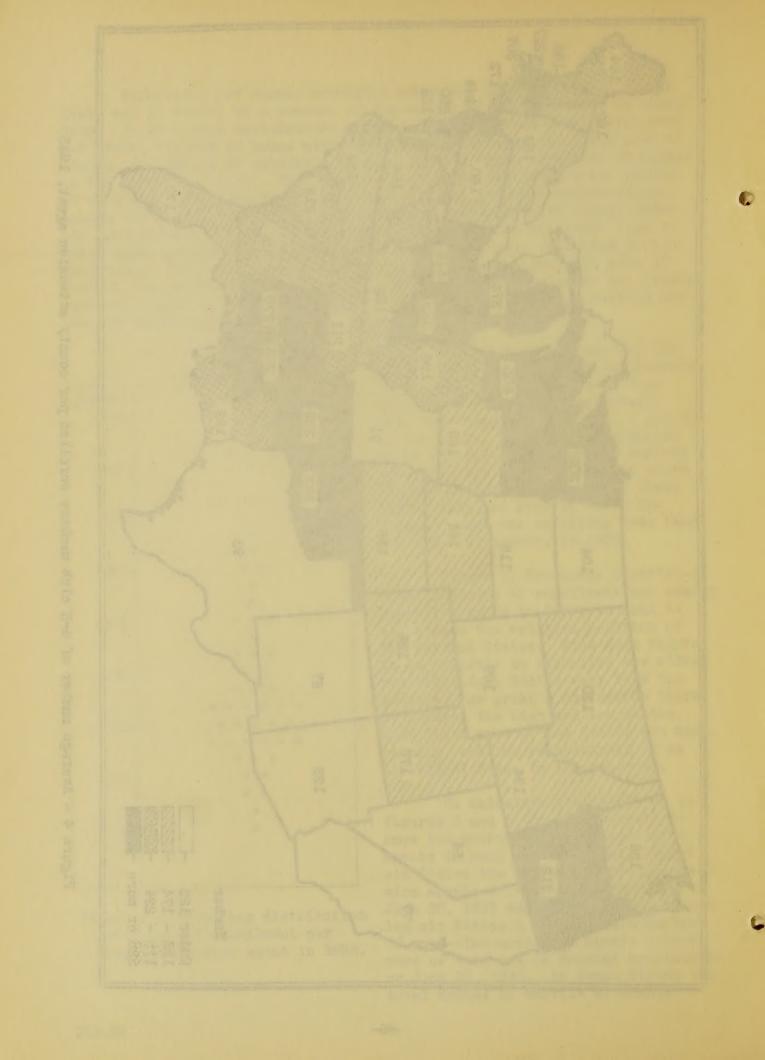


Figure 4 - Average number of 4-H club members enrolled per county extension agent, 1935



extension agents given in 1935 annual reports were divided by 12 to obtain the number of county extension agents on a yearly basis. The total 4-H enrollment reported in 1935 was divided by the number of county extension agents to determine the average enrollment per agent.

How Many Rural Boys and Girls Are Reached by the 4-H Program?

The increase in total enrollment has resulted in an increase in the percentage of rural boys and girls who are 4-H members. The 1935 enrollment is 7.94 percent of 12,558,815, the number of rural (farm and nonfarm) boys and girls 10 to 20 years of age, inclusive, reported in the 1930 census. This does not mean that 4-H club work is reaching less than 8 percent of this group.

The average member continues in the work for 2.4 years or 21.8 percent of the possible ll-year period of membership. For this reason the percentage of the boys and girls who are 4-H members for the average period of 2.4 years is almost five times the percentage of the total boys and girls who are now enrolled. The best measure of the percentage of rural boys and girls who are being reached by the 4-H club program is to compare the new membership each year with the number of rural boys and girls who pass the average 4-H starting age during the year. The number who pass the average starting age of 12.2 years is calculated by averaging the number of 11-year olds and 12-year olds reported by the 1930 census (fig. 5).

This measure gives a more accurate picture of the way in which 4-H club work is covering the potential field than does the percentage of those 10 to 20 who are enrolled on a given date. As an example, two States or counties each might have 10 percent of the 10 to 20 year group enrolled. One might be reaching 37 percent for an average of 3 years each while the other would be reaching 55 percent for an average period of 2 years.

Year	New members enrolled	Percentage	Percentage 10 20 30
1930 1931 1932 1933 1934 1935	400,381 412,314 400,468 379,933 390,260 434,345	33.1 34.1 33.1 31.4 32.3 35.9	
Aver- age	402,950	33.3	

Figure 5.--Ratio of new 4-H members to the rural (farm and nonfarm) boys and girls of 4-H starting age. (Average of ages 11 and 12 as reported in 1930 census, 1,208,978.)

Data on the total number of new members enrolled each year were first available in 1930, but the steady increase in total enrollment would indicate that there was an increase in the number of new members enrolled annually from 1920 to 1931. From 1931 to 1933 the number of new members enrolled decreased. In 1934 there was a slight increase over 1933, but in 1935 the increase of 44,000 over 1934 established a new high mark for new enrollments of almost 435,000. This was 35.9 percent of the rural boys and girls of the average 4-H starting age.

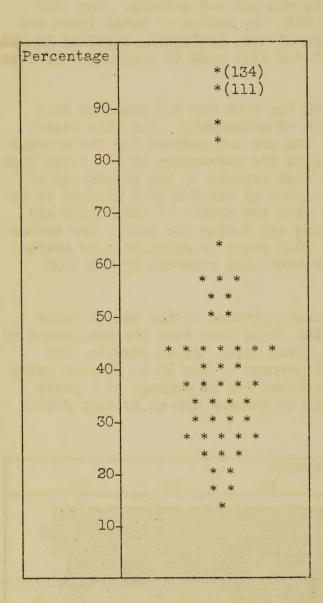


Figure 6.--Frequency distribution by States of ratio of new enrollment to rural boys and girls passing the average 4-H starting age in 1935.

There is a wide variation among the States in the percentage of rural boys and girls that are being reached by 4-H club work (figs. 6 and 7). The four States that had a new enrollment of more than 80 percent of the rural boys and girls who passed the average 4-H starting age in 1935 cannot look forward to any significant increase in 4-H enrollment by enrolling a larger number of new members annually. In contrast it is possible for the four States that were reaching less than 20 percent of the rural boys and girls to increase their 4-H enrollment 500 percent by increasing the annual enrollment of new members. On the basis of 1935 enrollment, 12 States are reaching more than 50 percent of the rural boys and girls. Large increases in total enrollment in these States can be achieved only by increasing the average length of time that the 4-H members continue in the work.

901-36 -8-

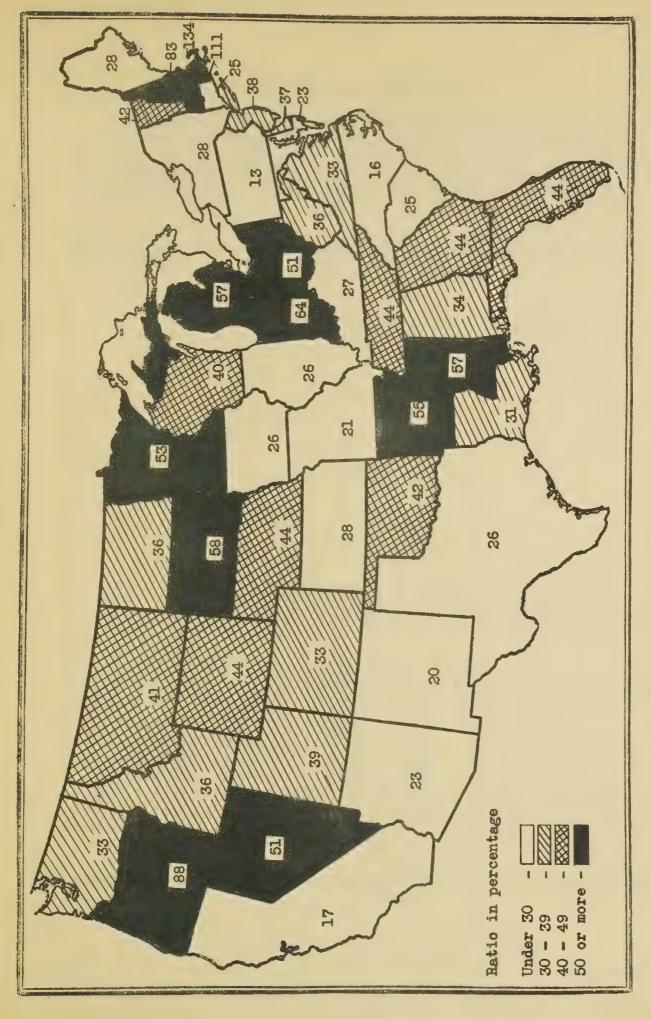
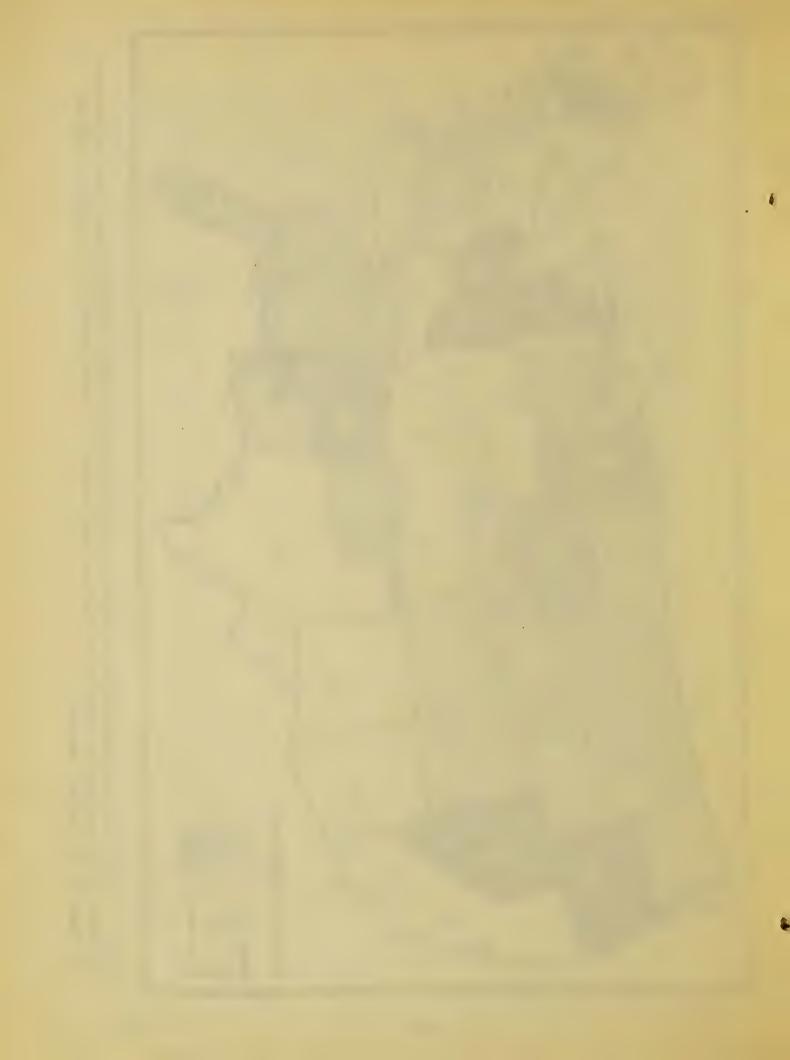


Figure 7 - Ratio of first year 4-H club members enrolled in 1935 to total number of rural (farm or nonfarm) boys and girls reaching the average 4-H starting age (Average of those reported as 11 years of age and 12 years of age in 1930 Census)



Percentage of Completions

Percentage of completions has been widely used as a measure of successful 4-H club work. The standards used to determine enrollment and completion vary somewhat among the States. Completion is closely related to enrollment, and as statistical measures they are compensating. For this reason, the two measures should be considered jointly.

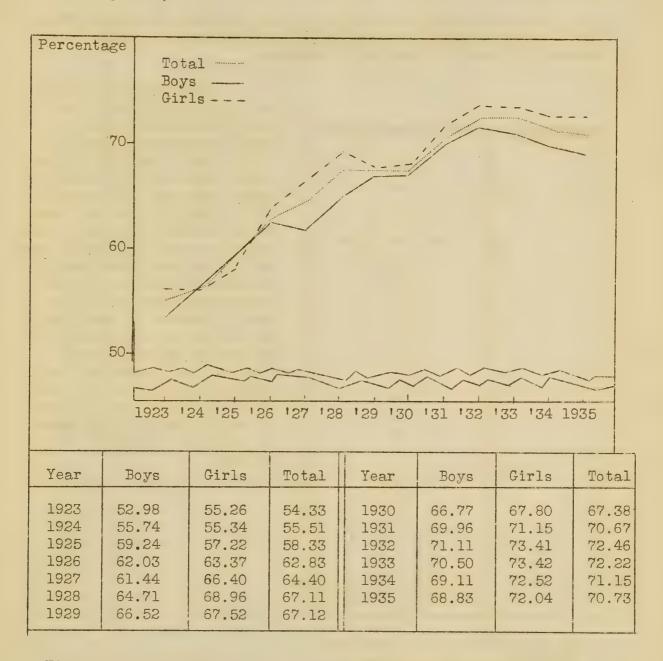


Figure 8.—Percentage of 4-H members completing their project work 1923-35.

901-36

For the country as a whole, percentage of members completing had a steady increase from 1923, when it was first reported, to 1932 (fig. 8). From 1932 to 1935, there has been a slight but annual decrease in the percentage of members completing their projects. Starting with 54.3 percent in 1923 and reaching the high point of 72.5 percent in 1932, percentage of completion was 70.7 percent in 1935, or 12.4 percent higher than it had been 10 years earlier, in 1925.

The percentage of completion for boys and girls has been very similar and both have experienced the 10-year period of increase followed by a period of decrease.

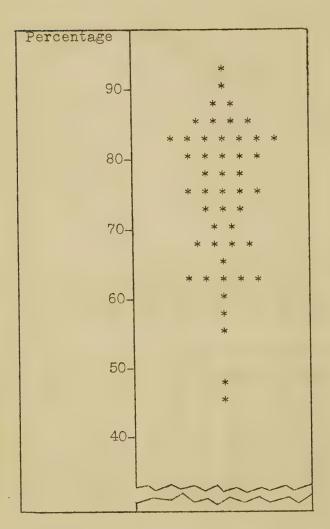


Figure 9.--Frequency distribution by States of percentages of members completing in 1935.

There were 16 States in which more than 80 percent of 4-H club members completed their projects in 1935 (figs. 9 and 10). Contrast these with 2 States where less than 50 percent of the 4-H club members completed their work, the 2 more with less than 60 percent, and the 7 more with less than 65 percent completion. If these percentages were raised to the 80 percent or even the 70 percent mark, the average for the Nation would be much higher. One State that has maintained more than 90 percent completion for a number of years stands as an example of what can be done in this respect.

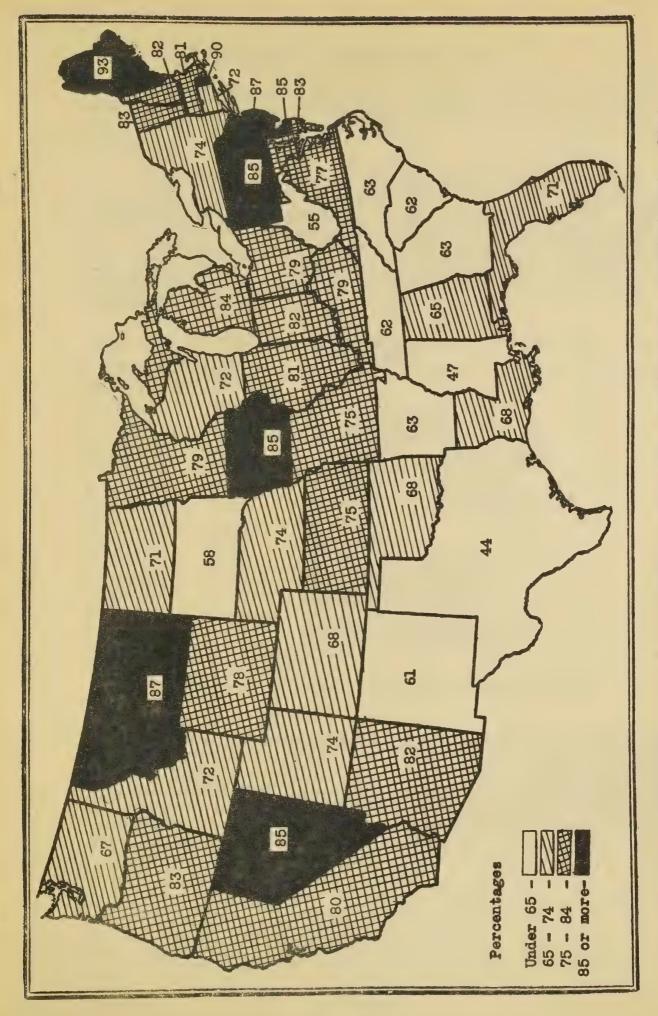
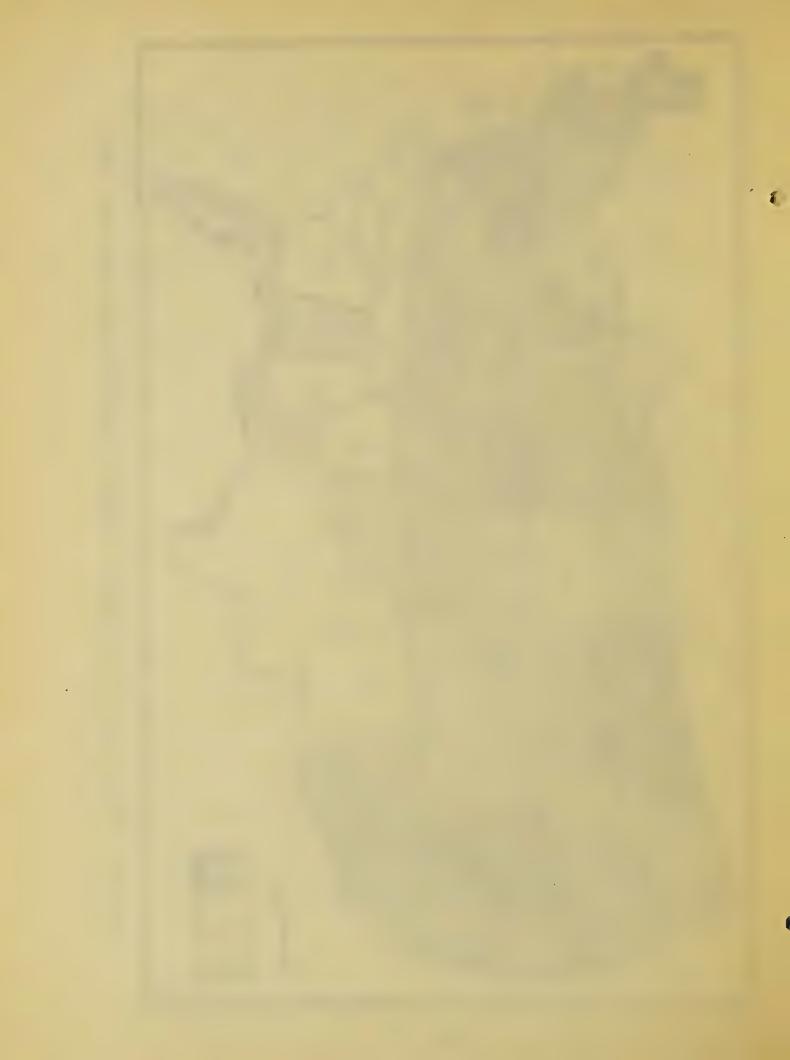


Figure 10 - Percentage of 4-H club members enrolled who completed their project work - 1935



Percentage of Members Who Reenroll

Another measure of the effectiveness of 4-H club work is the length of time that the young people continue as members. Members who find the work interesting and helpful will enroll again the following year.

This may be expressed by the percentage of members who reenroll (fig. 11). There has been a very slight trend toward a higher percentage of reenrollment among the girls during the 1930 to 1934 period. There was a significant increase in the percentage of boys reenrolled from 1930 to 1932. From 1932 to 1934, the decrease was even greater than the increase in the previous period. In 1935 the reenrollment for both boys and girls was higher than in any year between 1930 and 1934.

Year	Percentage	Percentage 50	e 55	60	65
1930 1931 1932 1933 1934	Boys 58.18 59.80 61.52 59.70 56.88	7À (777777 7À (7777777 7À (7777777 7À (7777777		7 <u>3</u> ?77773 ?7777777	00
1935 1930 1931 1932 1933 1934 1935	62.67 Girls 54.31 56.98 57.28 57.77 57.14 60.61				

Figure 11.--Reenrollment of 4-H club members, 1930-35.

Although the percentage of reenrollment showed an increase in 1935, an analysis of the data available for the 6-year period 1930-35 fails to indicate any significant progress in increasing length of membership. For boys and girls the country over, the average length of membership is 2.4 years with boys continuing for 2.5 years and girls for 2.3 years. Increased reenrollment over a period of years will mean an increased length of membership.

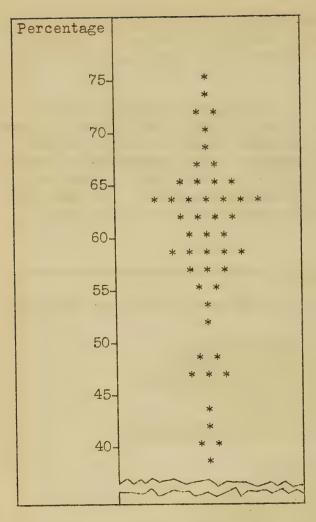


Figure 12.--Frequency distribution by States of percentage of reenrollment in 1935.

In 1935 there were 10 States in which more than 65 percent of the 1934 members were still members in 1935. In contrast, there were 10 States in which less than 50 percent of the 1934 members continued the work in 1935 (figs. 12 and 13).

The States that have a low 4-H club enrollment often justify it on the grounds that larger numbers would mean a lower quality of work. The data for 1935 (table 1) show the opposite to be true. The 15 States with the lowest enrollment per county extension agent have a lower average percentage of completion and percentage of reenrollment than the States with larger enrollment. This does not necessarily mean that large enrollment is the reason for high completion or for high reenrollment. It does mean that States have developed large enrollments without any loss in the quality of work being done. It is likely that the States which recognize the value of 4-H work by getting large enrollments also recognize that a high quality of work is worth while.

Table 1.--Effect of large enrollment upon percentage of completion and percentage of reenrollment for 1935.

Number of 4-H members per extension agent	Average number per agent	Average percentage of completion	Average percentage of reenrollment	
Less than 140	110	71.05	53.95	15
140-225	176	75.04	60.15	19
More than 225	313	76.08	61.23	14

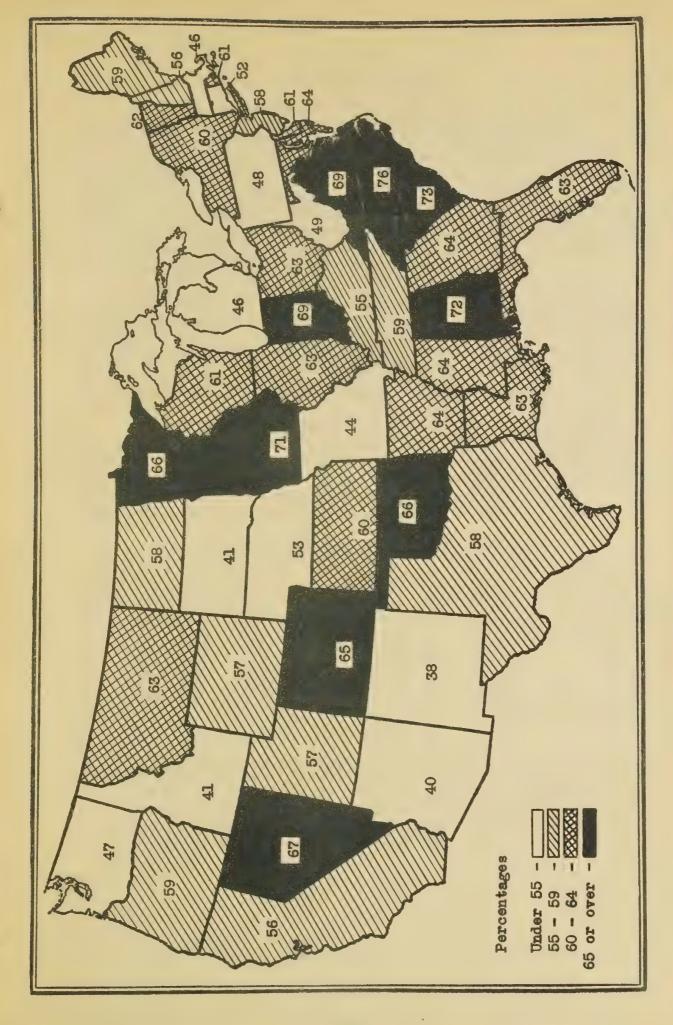


Figure 13 - Percentage of 1934 4-H club members who reenrolled in 1935



Age of 4-H Members

Because of a desire to reach the 16 to 20 age group with an extension program, considerable interest has been shown in the age of the young people that 4-H club work is reaching. Roughly speaking, out of every 10 members 4 are 10 to 12 years of age, 4 are 13 to 15 years, and 2 are 16 to 20. Many people are asking the question, "Is 4-H work making any progress in reaching the 16 to 20 age group?" In the case of both boys and girls the percentage of members in the older group increased slightly each year from 1930 to 1933. From 1933 to 1935 there has been a slight decrease. The data fail to show a trend in either direction (fig. 15).

In the 6-year period, for which data on age are available, there has not been a variation of more than 0.2 a year in the average age of 4-H members (table 2). The slight increase in average age of members which reached a high point in 1933 may be explained by the fact that a smaller percentage of the enrollment was new members in that year than in the years immediately preceding.

The average starting age of the members shows a slight but not a significant decrease for the 6-year period. The tendency, however, is to enroll boys and girls when slightly younger. This may help to increase percentage of reenrollment, since other studies have shown that those who start young stay in 4-H club work longer than those who begin after they are 13 or 14 years of age.

Table 2. -- Average age of 4-H club members

Year	Boys	Girls	Boys started*	Girls started*
1930	13.49	13.22	12.46	12.26
1931	13.56	13.24	12.46	12.22
1932	13.64	13.28	12.41	12.16
1933	13.67	13.32	12.34	12.11
1934	13.67	13.31	12.32	12.08
1935	13.66	13.28	12.36	12.05

*Correction factor of 1 year has been added. Many agents report the age of the member at the time enrolled instead of at the end of the year. In addition to this, those reported as 11 years old include all who are not yet 12, many of whom are nearer to 12 than to 11 years of age.

Out-of-School Enrollment

An analysis of the 4-H members 16 to 20 years of age reveals that more than two-thirds of them are in school, despite the fact that only approximately one-third of the rural young people 16 to 20 are in school (fig. 14).

Group	. Number*	4-H members	Percentage	Percentage 5 10
10-12	3,690,505	398,798	10.8	
13-15	3,506,810	395,606	11.3	//////////////////////////////////////
16-20	1,847,998	143,830	7.8	77777777777
	3,513,502	59,510	1.7	Z1 .
(Out of school	<u> </u>		No sections	

*1930 Census - Farm and Rural Nonfarm.

Figure 14.—Percentage of rural boys and girls in various age groups enrolled as 4-H members, 1935.

The interesting fact is that 7.58 percent of the rural young people 16 to 20 years of age in school were enrolled as 4-H members in 1935. Only 1.69 percent of the out-of-school young people 16 to 20 were enrolled as 4-H club members. In the 6-year period 1930-35, the out-of-school enrollment has increased 50 percent, but this increase is of doubtful significance with less than 2 percent of the out-of-school rural young people enrolled. The fact that 4 1/2 times as many of the 16 to 20 in-school group are enrolled may be due to the close association of 4-H club work with the schools or because the same factors that keep the young person in school keep him in 4-H club work also.

Club Organization

From 1925 to 1935 there was an increase in the number of 4-H clubs, but this increase was not so great as the increase in enrollment. During this period there was a slight but steady increase in the average number of members per club. In 1925 the average club had 13.7 members; by 1934 and 1935 it had increased 2.7 to an average of 16.4 (table 3).

901-36 -17-

90 95 100												groups	16-20 years	17.1	17.7	18.9	19.3	18.8	18.2
80 85						**************************************	XXXX/////////	WWW.		XXXXX		by age	-15 year	40.3	39.7	38.6	38.3	39.3	39.4
65 70 75											16-20	Girls - Percentage	12 years	42.6	42.6	42.5	42.4	41.9	42.4
50 55 60	BOYS					GIRLS	THINITINIII				13-15	G1z	Year	1930	1931	1932	1933	1934	1935
35 40 45	BO		AIIIIIIIIIII			61						88	16-20 years	20.7	22.1	23.6	24.0	23.8	23.4
25 30											members, 10-12	by age groups	13-15 ye	41.1	40.4	39.7	39.2	39.6	40.0
10 15 20											Age of members,	rs - Percentage	9	38.2	37.5	36.7	36.8	36.6	36.5
0 5 10	1930	1932	1933	1934	1935	1930	1931	1932	1933	1935		Boys	Year	1930	1931	1932	1933	1934	1935

Figure 15 - Distribution of 4-H club enrollment by age groups



In 1934 and 1935 the number of 4-H clubs per county extension agent was less than it had been 10 years earlier. There was an increase in the number of 4-H clubs per extension agent from 1925 until 1932 when the average agent had almost 14 clubs. Since 1932 the decrease has reduced the number to 11.3 in 1934 and 11.7 in 1935 compared with 1925 when the average agent was supervising the activities of 11.9 clubs.

Table 3.--Number of 4-H clubs and average membership per club 1925-35

Year	Number of 4-H clubs	Average number of members per club	Average number of clubs per county extension agent
1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935	41,286 41,234 44,188 46,671 52,180 56,180 60,781 59,081 57,401 55,685 60,720	13.7 14.2 14.0 14.2 14.5 14.6 14.6 15.7 16.1 16.4	11.9 11.7 12.3 12.7 12.5 13.1 13.7 13.8 13.2 11.3

4-H Club Activities

Since 1925 there has been an increase of 263 percent in the number of demonstration teams, while the number of judging teams increased 406 percent during the same period (table 4).

In 1925 only one 4-H club in eight had a judging team and one in four a demonstration team. In 1935, one out of every two clubs had a judging team and two out of every three clubs had demonstration teams.

Table 4.--4-H club demonstration and judging teams, 1925-35

Year	Demonstr	ation teams	Judging teams				
1081	Number	Number per club	Number	Number per club			
1925	11,563	0.28	5,383	0.13			
1926	13,508	0.33	6,405	0.16			
1927	15,583	0.35	7,057	0.16			
1928	18,632	0.40	7,948	0.17			
1929	21,809	0.42	10,095	0.19			
1930	23,524	0.42	12,533	0.22			
1931	29,751	0.49	16,104	0.26			
1932	34,453	0.58	17,304	0.29			
1933	. 31,993	0.56	18,652	0.32			
1934	35,870	0.64	21,421	0.38			
1935	41,922	0.69	27,257	0.45			

4-H Club Local Leaders

The increase from approximately 48,000 to more than 100,000 in a 10-year period is an indication of the increasing importance of the local leader in 4-H club work (fig. 17).

In 1925, most of the clubs had one local leader. In 1935, there were almost 18 local leaders for every 10 clubs, indicating that most clubs have not only a local leader but also an assistant leader.

There has been a slight increase in the number of local leaders for each 100 4-H club members. In the middle of the last decade there were approximately 9 local leaders for each 100 members, while in 1935 there were 11.

Data on the number of 4-H club meetings held by 4-H clubs and conducted by a local leader with no agent present were first reported in 1930. In 6 years the number of meetings held without the agent in attendance increased 76 percent, from 2.5 to 4.4 per club (fig. 16).

Year	Number	Number of meetings per club
1930 1931 1932 1933 1934 1935	2.5 3.0 3.7 3.7 4.4 4.4	

Figure 16.--Number of meetings per club conducted by the local leader with no agent present.

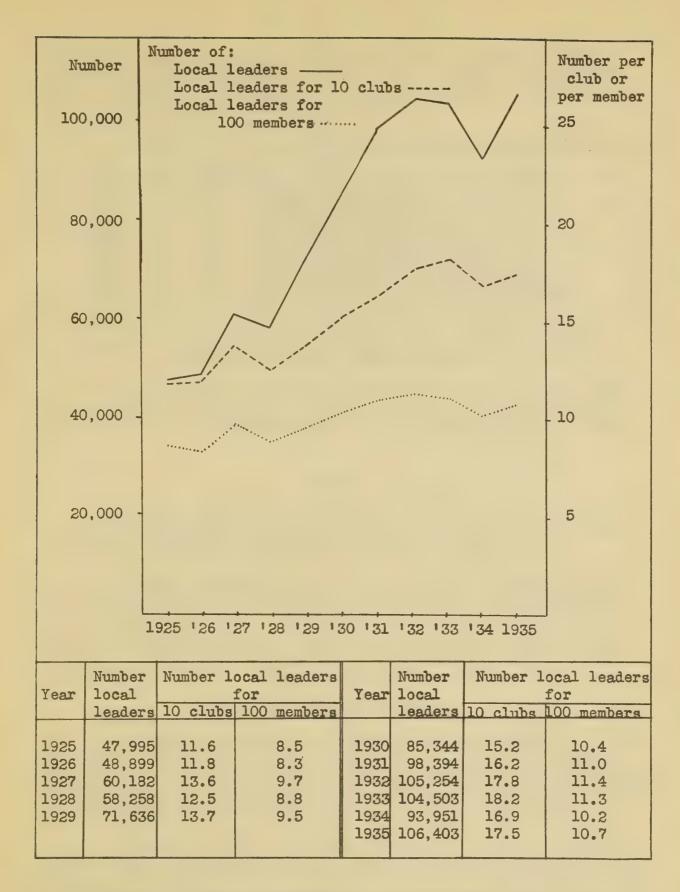


Figure 17 - Local leadership of 4-H club work, 1925 - 1935



In 1935 the average local leader attended almost twice as many local-leader training meetings as were attended by the local leaders of 1930. The number of meetings attended per leader increased steadily from 1.9 to 3.4 (fig. 18).

Year	Number	Attendance	?	3	4
1930 1931 1932 1933 1934 1935	1.9 2.1 2.4 2.6 3.1 3.4			7) 7/7/// 7/7/////	

Figure 18.--Average number of local-leader training meetings attended per local leader, 1930-35.

The increased use of local leaders indicated by these trends is probably one of the most important methods that has been used to increase not only the volume but also the quality of 4-H club work.

Outlook

Both an increase in the number of 4-H members and an improvement in the quality of work done by the individual member are goals which most extension workers have set for themselves.

Increased membership may be developed in two ways: (1) By enrolling more new members; (2) by increasing the length of membership. Regardless of the method used, an increase in total membership will require either the addition of more county extension agents or increased 4-H club activity on the part of agents already employed.

Enrolling More New Members

In order to bring out more clearly the large numbers of rural boys and girls who are not now being reached by 4-H club work, an attempt has been made in figure 19 to represent diagrammatically the situation in 1935 with regard to the likelihood of boys and girls at the different age levels ever being enrolled in a 4-H club.

The entire area of the graph represents all rural boys and girls from 10 to 18 years of age, inclusive, according to the 1930 Census. The number of boys and girls at the age at which they usually start in 4-H club work is indicated by the 100 percent line. In addition to the 965,342 rural boys and girls 10 to 18 years of age enrolled in 4-H club work in 1935, it is calculated that 1,894,285 had previously been in club work and that 1,051,421 others will have been club members before passing their nineteenth birthday. If the volume of

901-36

club work under way in 1935 remains practically constant, then approximately 36 percent of all rural young people will at some time or other have been in 4-H club work. This leaves 64 percent or a total of 6,681,910 rural boys and girls who will not have been directly touched by boys' and girls' club work while passing through the age period from 10 to 19 years.

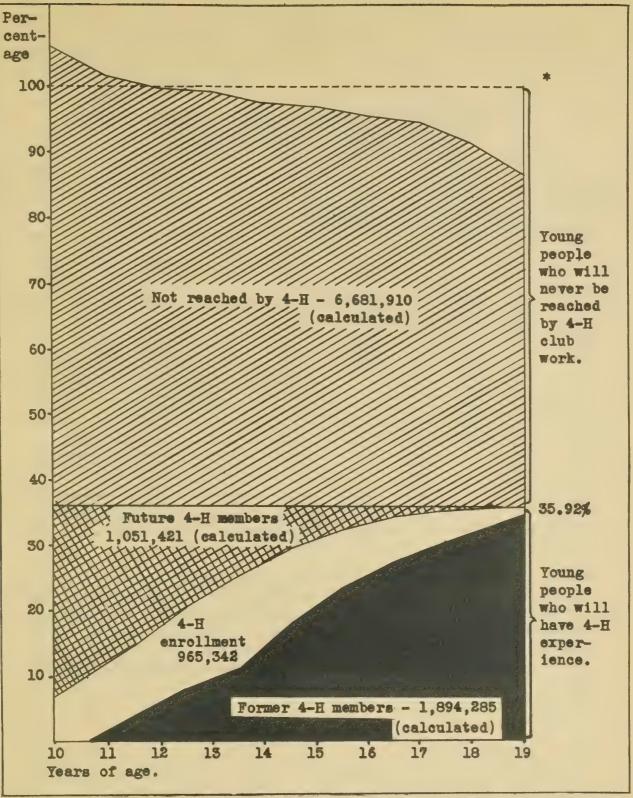
The diagram is also useful in determining the approximate membership relation of a particular age group to the 4-H clubs. For example, 23.1 percent of the 15-year olds have been in a 4-H club and dropped out. An additional 9.0 percent are current 4-H club members, while 3.8 percent more will join within the next 3 years.

Assuming that the average club member is represented by a horizontal line (17.96 percent) half way between 0 and 35.92 percent, it may be ascertained from the diagram that he joined at 12.2 years of age, continued in club work for 2.4 years, and at 14.6 years of age passed from an active to a former 4-H club member.

Not all rural boys and girls are interested in becoming 4-H club members. It is probable if opportunity were available that 3 out of 4 would like to join. To reach this proportion for a 2.4-year period would necessitate more than doubling the 1935 volume of 4-H club work.

Increasing Length of Membership

Increasing the average length of time that a member continues in club work is the second method of increasing total enrollment. Tracing the club history of 812,841 members who first enrolled in 1930 and 1931 it is found that 42.2 percent dropped out at the end of their first year of club work, 22 percent continued for 2 years before dropping out, 14 percent stopped at the end of the third year, 9 percent continued for 4 years, and 12 out of every 100 members continued 5 years or longer (table 5 and fig. 20). These 12 will continue in the work for an average of approximately 6 years which will give an average length of membership for the whole group of 2.39 years. When the percentage of reenrollment for this group is calculated for the 5-year period it is found to be 59.03 percent. This is slightly below the percentage of reenrollment in 1935. This indicates that if the 1935 percentage of 61.49 percent is maintained for the next few years, the average length of membership will be increased.



*100% is the number of young people that pass the average 4-H club starting age (average 11 and 12 years of age, 1930 census - 1,208,978) during a year.

Figure 19 - Diagrammatic representation of the opportunity for 4-H membership based upon relation of 1935 enrollment to rural young people 10-18. (Area of the chart represents farm and rural nonfarm young people 10 to 18 years of age, 1930 census - total, 10,592,958.)



The possibility of increasing length of membership and in turn total enrollment may be seen by comparing the five high States and five low States.

Table 5.--Length of membership of boys and girls who first enrolled in 1930 and 1931

Groups	Average of five low States	Average of five high States	United States
Percentage of members enrolled for: 1 year only	59.7	26.9	42.1
	21.3	24.1	22.4
	9.8	17.0	14.3
	4.5	11.8	9.0
	4.7	20.2	12.2
	43.43	68.43	59.03
	1.78	2.94	2,39

If the five low States were to increase their length of membership to equal that of the five high States, their total enrollment would be increased 65 percent without any increase in the number of new members enrolled annually. If length of membership for the country as a whole were increased to 3 years the total enrollment would be increased 25 percent.

Summary

The most significant trends in 4-H club work that can be expressed statistically are:

- 1. Increasing total enrollment.
- 2. Increasing enrollment per county extension agent.
- 3. Increasing number of county extension agents.
- 4. Increasing percentage of rural boys and girls reached by 4-H work.
- 5. Increasing percentage of completions.
- 6. Increasing average size of individual 4-H clubs.
- 7. Increasing number of demonstration and judging teams.
- 8. Increasing use of local leadership.

Wide variations among the States exist in:

- 1. 4-H enrollment per county extension agent.
- 2. Ratio of new 4-H members to rural boys and girls who reach the average 4-H starting age.
- 3. Percentage of completions.
- 4. Percentage of reenrollment.

While it is recognized that the progress of the 4-H club movement cannot be measured by statistics alone and that any one of these measurements may not be a just basis for comparisons, the four considered together give a well-rounded analysis that can be used as a basis for a program to improve 4-H club work.

The total enrollment of 4-H club members in the United States would be increased to more than 1,300,000 if the same number of new members were enrolled each year as in 1935 and if the average length of membership were increased to 3 years.

The total enrollment of 4-H club members in the United States would be increased to more than 2,100,000 if three out of four of the rural boys and girls were enrolled as members and continued in the work for 2.4 years.

If length of membership were increased to 3 years and three out of every four of the rural boys and girls were enrolled as members, the annual enrollment of 4-H clubs in the United States would be more than 2,700,000.

Supplement

Table 6 on pages 28 and 29 presents additional statistical data by States for 1935.

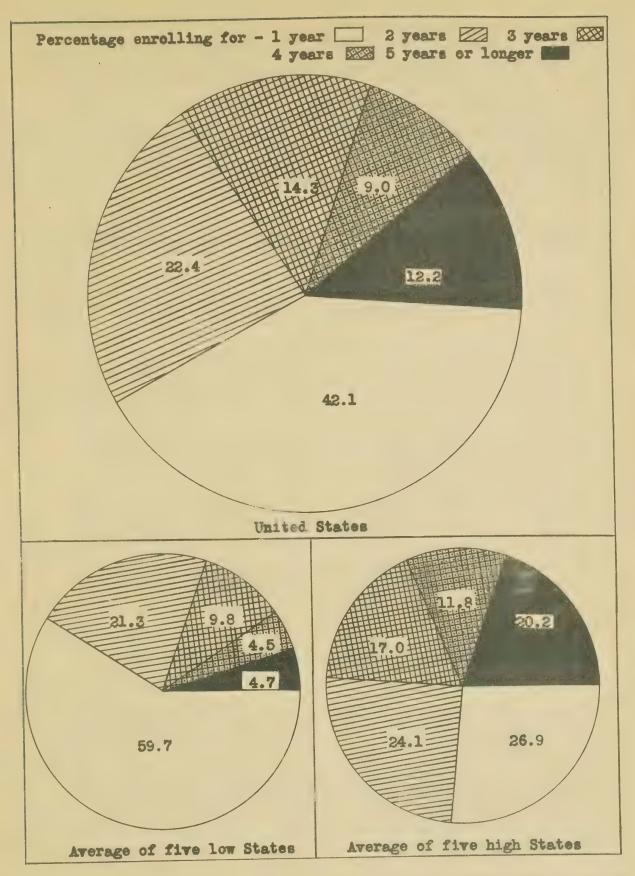


Figure 20 - Length of membership of boys and girls who first enrolled in 4-H club work in 1930 and 1931

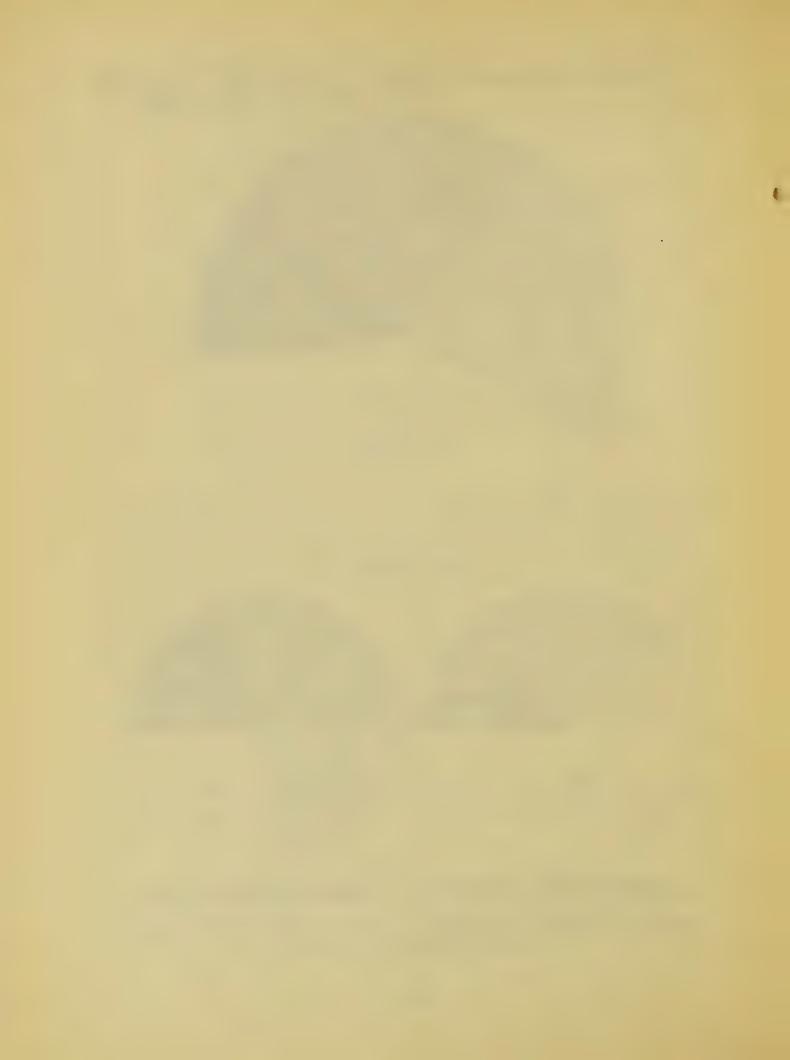


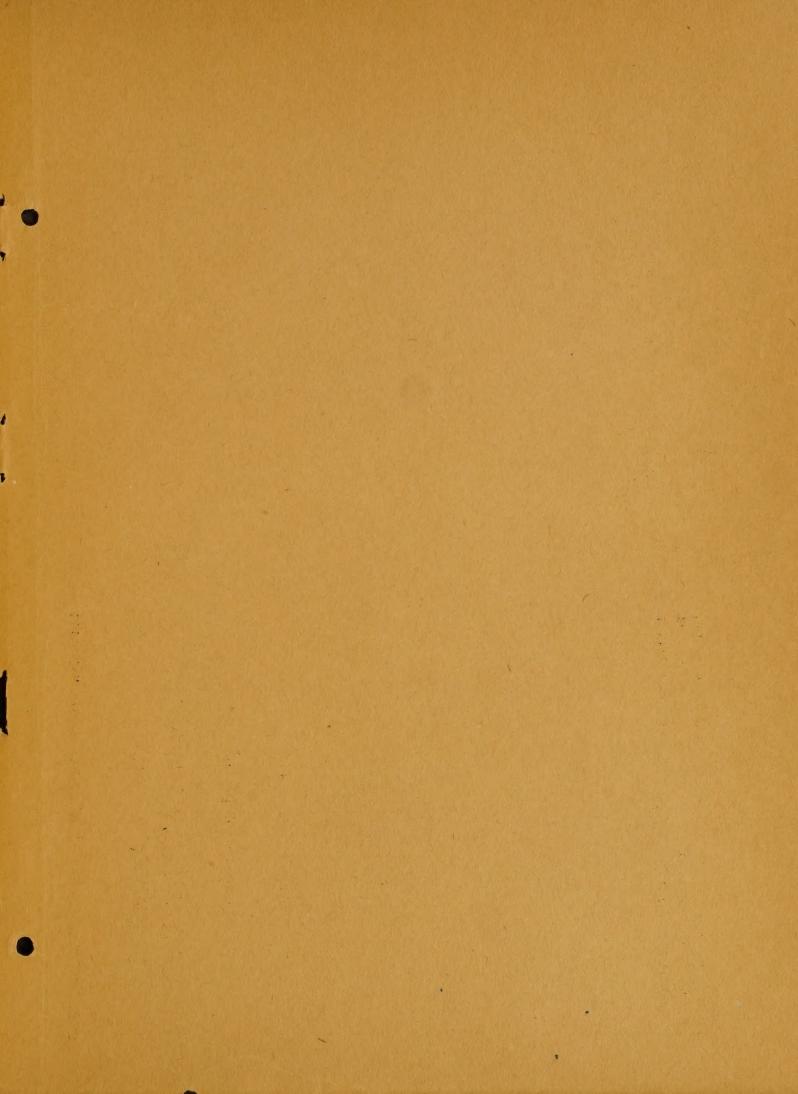
Table 6. -- 4-H club and other data by States, 1935

	2.	
Percent- age reached by club	28.24 41.72 133.51 111.40 12.35 112.40 37.32 37.32 37.32 37.32 37.32	25 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Rural boys and girls reaching 4-H start-	007107108074M	45,199 29,638 41,275 41,275 33,340 30,904 31,022 37,275 12,943 19,276 23,931 390,917
Members per county extension sion agent	184 162 327 307 150 150 150 162 191	1,449 1,62 1,04 1,48 1,48 1,48 1,48 1,48 1,48 1,48 1,4
County exten- sion agents 1935		126* 157* 157* 157* 165* 165* 1511
Percentage completion	83.35 83.35 83.35 72.14 83.62 87.48 85.18 85.24 77.69	25
Total comple- tions 1935	6,203 15,085 15,085 15,616 2,846 10,429 11,919 11,021 103,833	27, 44, 412 19, 465 19, 465 28, 535 28, 535 28, 535 29, 748 20, 748 20, 748 21, 613 13, 613 13, 613
Total enroll- ment 1935	6,645 19,321 11,671 11,922 13,647 13,647	26, 451 24, 550 26, 385 21, 775 31, 775 21, 213 43, 167 24, 321 24, 321 10, 601 10, 601 12, 955 10, 601 12, 955 11, 8 12, 955 12, 6 12, 6 13, 6 14, 15 15, 955 16, 11, 8
New members 1935	10,79,87,01 10,79,87,01 10,79,87,01 10,72,87,01 10,72,87,01	22,982 111,01,121 101,011 101,
Percent- age re-en- rolled	58 612 612 612 612 612 612 612 612 612 612	63.55.47.75.05.05.47.75.05.05.47.75.05.05.47.47.47.47.47.47.47.47.47.47.47.47.47.
1934 members re-en-	2,999 2,999 1,671 1,671 1,007 1,107 1,107 1,00 1,00	23,469 27,169 27,003 27,118 27,003 27,003 27,926 27,003 27,938 27,038 27,038 27,038 27,038 27,038
Enroll- ment 1934	18,799 18,799 18,799 11,599 11,599 12,730 12,730 13,730 13,730 13,730 13,730 13,730 13,730	22,728 23,315 24,592 27,649 30,820 42,418 23,126 11,490 12,333 12,396 321,311
State	Maine New Hampshire. Vermont Massachusetts. Connecticut Rhode Island New York Pennsylvania Pennsylvania New Jersey Delaware Maryland Wast Virginia Subtotal, East States	Ohio Indiana Kentucky Illinois Wichigan Wisconsin Minnesota Iowa North Dakota South Dakota South Dakota South Cakota South Cakota Central States

cases the total months of service reported by county extension agents and assistants was divided by 12 to obtain number of agents on a yearly basis.

Table 6. -- 4-H club and other data by States, 1935 (Contd.)

Percent- age reached by club	32.89 15.89 15.67 17.44	41.19 36.05 43.91 33.13 38.72 51.48 16.61 87.59 32.54 34.78
Rural boys and girls reaching 14-H start- ing age	39,825 36,634 56,282 15,373 45,592 41,067 35,454 36,958 38,176 78,837	8,186 7,536 3,177 11,528 6,381 7,154 7,154 5,968 26,987 9,249 13,840 -
Members per county extension	154 134 218 201 170 270 270 228 182 283 93 15	130 134 109 138 170 57 123 138 114 1- 131
County exten- sion agents ¹	210 220 122 274 274 163 163 163 163 163 2420	250 271 272 273 273 274 275 275 276 276 276
Percent- age com- pletions 1935	77.15 63.45 61.85 71.80 62.35 64.81 63.85 63.45 61.63	87.02 77.65 77.65 77.65 74.04 81.77 81.54 79.91 87.84 77.26
Total comple- tions 1935	24,948 16,485 16,485 34,830 10,884 23,650 23,650 23,841 26,495 15,463 31,470 18,348 18,348	5,663 2,489 2,206 4,042 1,351 2,010 8,219 14,686 1,402 1,402 54,335
Total enroll- ment 1935	38,338 26,542 26,611 54,976 44,942 45,130 41,843 41,843 41,843	6,508 4,840 2,841 6,837 5,459 2,465 10,285 17,628 17,628 17,628 1,596 1,596 1,596 1,596
New members 1935	13100 9404 9404 6799 15700 19654 15971 20257 20257	3,372 2,717 1,395 3,819 2,471 4,88 1,418 1,394 4,483 8,101 4,503 4,503 4,6d) 1,503 1,503 1,503 1,503 1,503 1,503 1,503
Percent- age re-en-	65.75 65.27 65	63.38 40.73 56.77 56.77 56.95 56.95 57.60 58.88 46.62 54.01 54.01
1934 members re-en- rolled	19, 23 119, 23 12, 13 12, 13 13, 11 13, 13 13, 1	3,136 1,146 1,123 2,068 2,988 2,988 1,071 1,071 4,059 4,059 6,13 6,13 6,13 6,13 6,13 6,13 6,13 6,13
Enroll- ment 1934	27, 721 26, 563 23, 747 51, 018 13, 444 39, 680 45, 276 34, 401 34, 401 36, 992 36, 992	4,948 2,512 2,517 4,688 4,688 10,136 16,180 8,707 1,582 65,052
State	Virginia North Carolina South Carolina Georgia Florida Alabama Mississippi Tennessee	South. States Montana Idaho Idaho Wyoming Colorado Utah New Mexico Arizona California Oregon Washington Hawaii Alaska Subtotal, West, States



Trends in 4-H Club Work Statistical Analysis of

With Special Reference to 1935

Barnard D. Joy



Division of Cooperative Extension C. B. SMITH Chief Extension Service C. W. WARBURTON Director UNITED STATES DEPARTMENT OF AGRICULTURE Washington, D.C.